

## **ASU: Use-case Detailed Specification—Style 1**

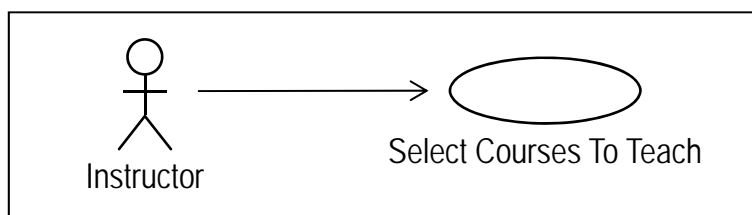
**This style does not make use of subflows.**

### **Use Case: Select Courses To Teach**

#### **Brief Description**

This use case describes how a professor selects courses to teach for a term that has not started.

#### **Use-case Diagram**



#### **Basic Flow**

1. The use case begins when the Instructor actor chooses to select the courses he wants to teach.
2. The system displays the interface for selecting courses to teach.

#### **{Enter Term}**

Single location extension point.

3. The Instructor indicates the term and year in which he would like to teach courses.

#### **{Select Activity}**

Single location extension point.

4. While the Instructor has an activity to perform
  - 4.1. If the CREATE activity is selected

#### **{Begin Creating Schedule}**

- 4.1.1. The system retrieves and displays the available course information for the given term if the final date for changes has not passed.

#### **{Deadline Passed}**

Discrete locations extension point (see next page).

- 4.1.2. The Instructor selects the courses that he would like to teach.

#### **{Confirm Creating Schedule}**

- 4.1.3. The Instructor confirms the selection.
- 4.1.4. The system creates the Instructor's teaching schedule in the database.
- 4.1.5. The system notifies the Instructor that the teaching schedule has been created.

Region extension points.

## **ASU: Use-case Detailed Specification—Style 1 (cont'd)**

4.2. If the REVIEW activity is selected

**{Display Schedule}**

Single location extension point.

4.2.1. The system retrieves and displays the Instructor's teaching schedule.

4.3. If the MODIFY activity is selected

**{Begin Modifying Schedule}**

4.3.1. The system retrieves and displays the Instructor's teaching schedule and the available course information for the given term if the final date for changes has not passed.

**{Deadline Passed}**

Discrete location extension point (see previous page).

4.3.2. The Instructor adds course sections to and/or deletes course sections from his teaching schedule for the given term.

**{Confirm Modifying Schedule}**

4.3.3. The Instructor confirms the changes.

4.3.4. The system updates the Instructor's teaching schedule in the database.

4.3.5. The system notifies the Instructor that the modifications have been made.

5. The use case ends.

Region extension  
points.

## **ASU: Use-case Detailed Specification—Style 1** (cont'd)

### **Alternative Flows**

Exceptional Flow

#### **A1: Invalid Term**

At **{Select Activity}** if the entered term or year is invalid,

1. The system informs the Instructor that the term or year is invalid.
2. The flow of events is resumed at **{Enter Term}**.

Extension point at which the alternative flow can occur.

Extension point at which the flow of events resumes.

Variant Flow

#### **A2: Schedule Exists**

At **{Begin Creating Schedule}** if a schedule already exists.

1. The system informs the Instructor that a schedule already exists.
2. The flow of events is resumed at **{Select Activity}**.

Variant Flow

#### **A3: No Section Selected**

Compound condition for single extension points.

At **{Display Schedule}** or **{Begin Modifying Schedule}** if the Instructor has not selected any sections of courses to teach in the given term,

1. The system notifies the Instructor that this function is currently not available.
2. The flow of events is resumed at **{Enter Term}**.

Variant Flow

#### **A4: Change Date Passed**

At **{Deadline Passed}** if the final date for changes has passed,

1. The system rejects the request.
2. The use case ends.

A use case can end in an alternative flow.

Variant Flow

#### **A5: Cancel Activity**

Compound condition for regions.

At any point between **{Begin Creating Schedule}** and **{Confirm Creating Schedule}** or between **{Begin Modifying Schedule}** and **{Confirm Modifying Schedule}**,

1. The Instructor can cancel the activity.
2. The flow of events is resumed at **{Select Activity}**.

## ASU: Use-case Detailed Specification—Style 2

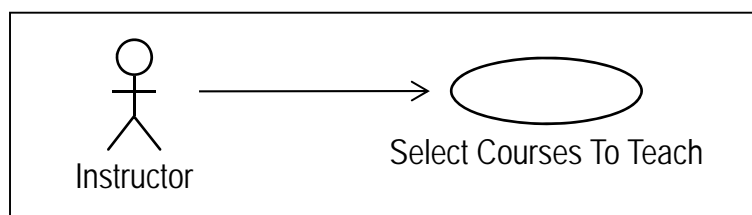
**This style makes use of subflows.**

### Use Case: Select Courses To Teach

#### **Brief Description**

This use case describes how a professor selects courses to teach for a term that has not started.

#### **Use-case Diagram**



#### **Basic Flow**

1. The use case begins when the Instructor actor chooses to select the courses he wants to teach.
2. The system displays the interface for selecting courses to teach.

#### **{Enter Term}**

3. The Instructor indicates the term and year in which he would like to teach courses.

#### **{Select Activity}**

4. While the Instructor has an activity to perform
  - 4.1. If the CREATE activity is selected
    - 4.1.1. Perform subflow **Create Schedule**.
  - 4.2. If the REVIEW activity is selected
 

#### **{Display Schedule}**

    - 4.2.1. The system retrieves and displays the Instructor's teaching schedule.
  - 4.3. If the MODIFY activity is selected
    - 4.3.1. Perform subflow **Modify Schedule**.
5. The use case ends.

## **ASU: Use-case Detailed Specification—Style 2** (cont'd)

### **Subflows**

#### ***S1: Create Schedule***

##### **{Begin Creating Schedule}**

1. The system retrieves and displays the available course information for the given term if the final date for changes has not passed.

##### **{Deadline Passed}**

2. The Instructor selects the courses that he would like to teach.

##### **{Confirm Creating Schedule}**

3. The Instructor confirms the selection.
4. The system creates the Instructor's teaching schedule in the database.
5. The system notifies the Instructor that the teaching schedule has been created.

#### ***S2: Modify Schedule***

##### **{Begin Modifying Schedule}**

1. The system retrieves and displays the Instructor's teaching schedule and the available course information for the given term if the final date for changes has not passed.

##### **{Deadline Passed}**

2. The Instructor adds course sections to and/or deletes course sections from his teaching schedule for the given term.

##### **{Confirm Modifying Schedule}**

3. The Instructor confirms the changes.
4. The system updates the Instructor's teaching schedule in the database.
5. The system notifies the Instructor that the modifications have been made.

## **ASU: Use-case Detailed Specification—Style 2** (cont'd)

### **Alternative Flows**

#### ***A1: Invalid Term***

At **{Select Activity}** if the entered term or year is invalid,

1. The system informs the Instructor that the term or year is invalid.
2. The flow of events is resumed at **{Enter Term}**.

#### ***A2: Schedule Exists***

At **{Begin Creating Schedule}** if a schedule already exists.

1. The system informs the Instructor that a schedule already exists.
2. The flow of events is resumed at **{Select Activity}**.

#### ***A3: No Section Selected***

At **{Display Schedule}** or **{Begin Modifying Schedule}** if the Instructor has not selected any sections of courses to teach in the given term,

1. The system notifies the Instructor that this function is currently not available.
2. The flow of events is resumed at **{Enter Term}**.

#### ***A4: Change Date Passed***

At **{Deadline Passed}** if the final date for changes has passed,

1. The system rejects the request .
2. The use case ends.

#### ***A5: Cancel Activity***

At any point between **{Begin Creating Schedule}** and **{Confirm Creating Schedule}** or between **{Begin Modifying Schedule}** and **{Confirm Modifying Schedule}**,

1. The Instructor can cancel the activity.
2. The flow of events is resumed at **{Select Activity}**.

**We note that the preceding two styles are *only examples*.**  
**There are *many different ways* to write use-case descriptions.**  
**A project should select a style and use it consistently.**